

# SULFONATED POLYANILINE SALT COMPOSITIONS, PROCESSES AND USES

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Publication date: 1993-06-24

Inventor:

Applicant:

Classification:

- International: **B41M5/26; C07C309/46; C08G73/00; C08G73/02; C08L79/00; C09K3/00; G02F1/01; G11B7/244; G11B7/245; H01B1/12; B41M5/26; C07C309/00; C08G73/00; C08L79/00; C09K3/00; G02F1/01; G11B7/24; H01B1/12; (IPC1-7): B41M5/26; C07C309/46; C08G73/00; C08L79/00; C09K3/00; G11B7/24**

- European: C08G73/02N1; G02F1/01L; G11B7/245; H01B1/12H6

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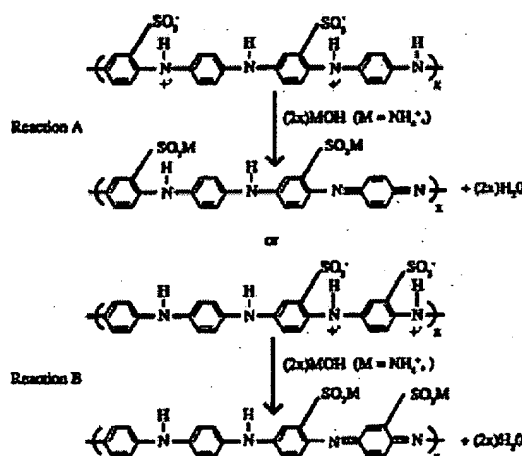
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Abstract not available for JP5503953T

Abstract of corresponding document: **WO9106887**

Sulfonic acid-substituted polyaniline salt compositions, processes for their preparation and uses therefor are disclosed. The sulfonated polyaniline salt compositions have fast electronic and optical responses to electrochemical potentials, improved environmental stability, and improved solubility. A process for producing the sulfonated polyaniline salt compositions comprises reacting a sulfonated polyaniline polymer with an aqueous basic solution. The sulfonated polyaniline compositions are useful for absorption of electromagnetic radiation, as a high density erasable date storage medium for use in information storage and processing applications, and to provide electronic, chemical, electrochemical, and optical microelectronic devices which use and control the chemical and physical properties of the sulfonated polyaniline salt compositions.



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## Family list

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- 1 **POLYANILINE COMPOSITIONS, PROCESS FOR THEIR PREPARATION AND USES THEREOF**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** H01M4/60; C08G73/02N1; (+3) **IPC:** B32B7/02; C08G73/00; C08G73/02 (+44)  
**Publication info:** **AT148551T T** - 1997-02-15
- 2 **SULFONATED POLYANILINE SALT COMPOSITIONS, PROCESSES AND USES**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** C08G73/02N1; G02F1/01L; (+2) **IPC:** B41M5/26; C07C309/46; C08G73/00 (+17)  
**Publication info:** **AT161653T T** - 1998-01-15
- 3 **POLYANILINE COMPOSITIONS, PROCESSES FOR THEIR PREPARATION AND USES THEREOF**  
**Inventor:** **Applicant:**  
**EC:** H01M4/60; C08G73/02N1; (+3) **IPC:** B32B7/02; C08G73/00; C08G73/02 (+47)  
**Publication info:** **AU638385B B2** - 1993-06-24
- 4 **Sulfonated polyaniline salt compositions, processes for their preparation and uses thereof**  
**Inventor:** EPSTEIN ARTHUR J; YUE JIANG **Applicant:** UNIV OHIO STATE RES FOUND  
**EC:** C08G73/02N1; G02F1/01L; (+2) **IPC:** B41M5/26; C07C309/46; C08G73/00 (+19)  
**Publication info:** **AU643918B B2** - 1993-11-25
- 5 **POLYANILINE COMPOSITIONS, PROCESS FOR THEIR PREPARATION AND USES THEREOF**  
**Inventor:** EPSTEIN ARTHUR J; YUE JIANG **Applicant:** UNIV OHIO STATE RES FOUND  
**EC:** H01M4/60; C08G73/02N1; (+3) **IPC:** B32B7/02; C08G73/00; C08G73/02 (+46)  
**Publication info:** **AU6608890 A** - 1991-05-16
- 6 **SULFONATED POLYANILINE SALT COMPOSITIONS, PROCESSES AND USES**  
**Inventor:** EPSTEIN ARTHUR J; YUE JIANG **Applicant:** UNIV OHIO STATE RES FOUND  
**EC:** C08G73/02N1; G02F1/01L; (+2) **IPC:** B41M5/26; C07C309/46; C08G73/00 (+17)  
**Publication info:** **AU6731690 A** - 1991-05-31
- 7 **POLYANILINE COMPOSITIONS, PROCESS FOR THEIR PREPARATION AND USES THEREOF**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** H01M4/60; C08G73/02N1; (+3) **IPC:** B32B7/02; C08G73/00; C08G73/02 (+47)  
**Publication info:** **CA2067142 A1** - 1991-04-20  
**CA2067142 C** - 2002-04-16
- 8 **SULFONATED POLYANILINE SALT COMPOSITIONS, PROCESSES AND USES**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** C08G73/02N1; G02F1/01L; (+2) **IPC:** B41M5/26; C07C309/46; C08G73/00 (+21)  
**Publication info:** **CA2067168 A1** - 1991-04-25  
**CA2067168 C** - 2001-03-13
- 9 **POLYANILINE COMPOSITIONS, PROCESS FOR THEIR PREPARATION AND USES THEREOF**  
**Inventor:** EPSTEIN ARTHUR (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)

- EC:** H01M4/60; C08G73/02N1; (+3) **IPC:** B32B7/02; C08G73/00; C08G73/02 (+45)  
**Publication info:** DE69029859D D1 - 1997-03-13
- 10 POLYANILINE COMPOSITIONS, PROCESS FOR THEIR PREPARATION AND USES THEREOF**  
**Inventor:** EPSTEIN ARTHUR (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** H01M4/60; C08G73/02N1; (+3) **IPC:** B32B7/02; C08G73/00; C08G73/02 (+45)  
**Publication info:** DE69029859T T2 - 1997-09-04
- 11 SULFONATED POLYANILINE SALT COMPOSITIONS, PROCESSES AND USES**  
**Inventor:** EPSTEIN ARTHUR (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** C08G73/02N1; G02F1/01L; (+2) **IPC:** B41M5/26; C07C309/46; C08G73/00 (+17)  
**Publication info:** DE69031867D D1 - 1998-02-05
- 12 SULFONATED POLYANILINE SALT COMPOSITIONS, PROCESSES AND USES**  
**Inventor:** EPSTEIN ARTHUR (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** C08G73/02N1; G02F1/01L; (+2) **IPC:** B41M5/26; C07C309/46; C08G73/00 (+17)  
**Publication info:** DE69031867T T2 - 1998-09-03
- 13 POLYANILINE COMPOSITIONS, PROCESS FOR THEIR PREPARATION AND USES THEREOF**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** H01M4/60; C08G73/02N1; (+3) **IPC:** B32B7/02; C08G73/00; C08G73/02 (+46)  
**Publication info:** DK495885T T3 - 1997-07-28
- 14 SULFONATED POLYANILINE SALT COMPOSITIONS, PROCESSES AND USES**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** C08G73/02N1; G02F1/01L; (+2) **IPC:** B41M5/26; C07C309/46; C08G73/00 (+19)  
**Publication info:** DK497898T T3 - 1998-08-31
- 15 POLYANILINE COMPOSITIONS, PROCESS FOR THEIR PREPARATION AND USES THEREOF.**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** H01M4/60; C08G73/02N1; (+3) **IPC:** B32B7/02; C08G73/00; C08G73/02 (+46)  
**Publication info:** EP0495885 A1 - 1992-07-29  
EP0495885 A4 - 1993-08-25  
EP0495885 B1 - 1997-01-29

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## Family list

44 family members for: JP5503953T

Derived from 36 applications

[Back to JP5503953T](#)**16 SULFONATED POLYANILINE SALT COMPOSITIONS, PROCESSES AND USES.****Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)**EC:** C08G73/02N1; G02F1/01L; (+2) **IPC:** B41M5/26; C07C309/46; C08G73/00 (+17)**Publication info:** EP0497898 A1 - 1992-08-12

EP0497898 A4 - 1993-01-07

EP0497898 B1 - 1997-12-29

**17 POLYANILINE COMPOSITIONS, PROCESS FOR THEIR PREPARATION AND USES THEREOF****Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)**EC:** H01M4/60; C08G73/02N1; (+3) **IPC:** B32B7/02; C08G73/00; C08G73/02 (+45)**Publication info:** ES2099715T T3 - 1997-06-01**18 SULFONATED POLYANILINE SALT COMPOSITIONS, PROCESSES AND USES****Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)**EC:** C08G73/02N1; G02F1/01L; (+2) **IPC:** B41M5/26; C07C309/46; C08G73/00 (+17)**Publication info:** ES2113351T T3 - 1998-05-01**19 POLYANILINE COMPOSITIONS, PROCESS FOR THEIR PREPARATION AND USES THEREOF****Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)**EC:** H01M4/60; C08G73/02N1; (+3) **IPC:** B32B7/02; C08G73/00; C08G73/02 (+45)**Publication info:** GR3023279T T3 - 1997-07-30**20 SULFONATED POLYANILINE SALT COMPOSITIONS, PROCESSES AND USES****Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)**EC:** C08G73/02N1; G02F1/01L; (+2) **IPC:** B41M5/26; C07C309/46; C08G73/00 (+17)**Publication info:** GR3026288T T3 - 1998-06-30**21 SULFONATED POLYANILINE SALT COMPOSITIONS, PROCESSES AND USES****Inventor:** **Applicant:****EC:** C08G73/02N1; G02F1/01L; (+2) **IPC:** B41M5/26; C07C309/46; C08G73/00 (+15)**Publication info:** JP2953671B2 B2 - 1999-09-27

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**22 POLYANILINE COMPOSITIONS, PROCESS FOR THEIR PREPARATION AND USES THEREOF****Inventor:** **Applicant:****EC:** H01M4/60; C08G73/02N1; (+3) **IPC:** B32B7/02; C08G73/00; C08G73/02 (+36)**Publication info:** JP2994747B2 B2 - 1999-12-27

JP5504153T T - 1993-07-01

**23 Electromagnetic radiation absorbers and modulators comprising polyaniline****Inventor:** EPSTEIN ARTHUR J (US); GINDER JOHN M (US); (+2) **Applicant:** UNIV OHIO STATE RES FOUND (US)**EC:** C08G73/02N1; D01F6/76; (+4) **IPC:** C08G73/02; D01F6/76; D06M10/10 (+13)**Publication info:** US5079334 A - 1992-01-07

- 24 Processes for preparation of sulfonated polyaniline compositions and uses thereof**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** H01M4/60; C08G73/02N1; (+3) **IPC:** C08G73/02; G02F1/01; G11B7/244 (+12)  
**Publication info:** **US5093439 A** - 1992-03-03
- 25 Compositions of insulating polymers and sulfonated polyaniline compositions and uses thereof**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** H01M4/60; C08G73/02N1; (+3) **IPC:** C08G73/02; G02F1/01; G11B7/244 (+10)  
**Publication info:** **US5109070 A** - 1992-04-28
- 26 Process for forming fibers of sulfonated polyaniline compositions and uses thereof**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** H05K9/00M4F; C08G73/02N1; (+4) **IPC:** C08G73/02; G02F1/01; G11B7/244 (+10)  
**Publication info:** **US5135696 A** - 1992-08-04
- 27 Polyaniline compositions, processes for their preparation and uses thereof**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** H01M4/60; C08G73/02N1; (+7) **IPC:** C08G73/02; D01F6/76; D06M10/10 (+21)  
**Publication info:** **US5137991 A** - 1992-08-11
- 28 Electromagnetic radiation absorbers and modulators comprising polyaniline**  
**Inventor:** EPSTEIN ARTHUR J (US); GINDER JOHN M (US); (+2) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** C08G73/02N1; D01F6/76; (+4) **IPC:** C08G73/02; D01F6/76; D06M10/10 (+12)  
**Publication info:** **US5147968 A** - 1992-09-15
- 29 Sulfonated polyaniline salt compositions and uses thereof**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** H01M4/60; C08G73/02N1; (+8) **IPC:** C08G73/02; D01F6/76; D06M10/10 (+19)  
**Publication info:** **US5159031 A** - 1992-10-27
- 30 Sulfonated polyaniline salt compositions, processes for their preparation and uses thereof**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** H01M4/60; C08G73/02N1; (+8) **IPC:** C08G73/02; D01F6/76; D06M10/10 (+22)  
**Publication info:** **US5164465 A** - 1992-11-17

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**Family list**44 family members for: **JP5503953T**

Derived from 36 applications

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- 31 Sulfonated polyaniline compositions, ammonium salts thereof, process for their preparation and uses thereof**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** H01M4/60; C08G73/02N1; (+7) **IPC:** C08G73/02; D01F6/76; D06M10/10 (+21)  
**Publication info:** **US5208301 A** - 1993-05-04
- 32 Electromagnetic radiation absorbers and modulators comprising polyaniline**  
**Inventor:** EPSTEIN ARTHUR J (US); GINDER JOHN M (US); (+2) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** C08G73/02N1; D01F6/76; (+4) **IPC:** C08G73/02; D01F6/76; D06M10/10 (+13)  
**Publication info:** **US5294694 A** - 1994-03-15
- 33 Electromagnetic radiation absorbers and modulators comprising polyaniline**  
**Inventor:** EPSTEIN ARTHUR J (US); ROE MITCHELL G (US); (+3) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** C08G73/02N1; D01F6/76; (+4) **IPC:** C08G73/02; D01F6/76; D06M10/10 (+12)  
**Publication info:** **US5463014 A** - 1995-10-31
- 34 Electromagnetic radiation absorbers and modulators comprising polyaniline**  
**Inventor:** EPSTEIN ARTHUR J (US); ROE MITCHELL G (US); (+3) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** C08G73/02N1; D01F6/76; (+4) **IPC:** C08G73/02; D01F6/76; D06M10/10 (+10)  
**Publication info:** **US5563182 A** - 1996-10-08
- 35 POLYANILINE COMPOSITIONS, PROCESS FOR THEIR PREPARATION AND USES THEREOF**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** H01M4/60; C08G73/02N1; (+3) **IPC:** B32B7/02; C08G73/00; C08G73/02 (+46)  
**Publication info:** **WO9105979 A1** - 1991-05-02
- 36 SULFONATED POLYANILINE SALT COMPOSITIONS, PROCESSES AND USES**  
**Inventor:** EPSTEIN ARTHUR J (US); YUE JIANG (US) **Applicant:** UNIV OHIO STATE RES FOUND (US)  
**EC:** C08G73/02N1; G02F1/01L; (+2) **IPC:** B41M5/26; C07C309/46; C08G73/00 (+17)  
**Publication info:** **WO9106887 A1** - 1991-05-16

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